

CLAIMS

What is claimed is:

1. A method for browsing a data communications network, the method comprising:
requesting user data from a user-controlled secure device if a network site that
requires said user data is accessed, said requesting occurring prior to requesting
said user data from another device; and
sending said user data to a network server associated with said network site if said
user data is received from said user-controlled secure device.
2. A method for browsing a data communications network, the method comprising:
receiving a request for user data;
returning said user data if said user data is found and if returning user data for said
request is enabled and if said user data comprises static user data;
reconfiguring said user data if said user data is found and if returning user data for
said request is enabled and if said user data comprises dynamic user data; and
returning said reconfigured user data.
3. A method for servicing data communications network information units, the method
comprising:
receiving user data associated with a network site;
using said user data if said user data comprises static user data; and

reconstructing said user data before using said user data if said user data comprises dynamic user data;

4. A method for browsing a data communications network, the method comprising:
requesting a cookie from a user-controlled secure device if a network site that requires said cookie is accessed, said requesting occurring prior to requesting said cookie from another device; and
sending said cookie to a network server associated with said network site if said cookie is received from said user-controlled secure device.
5. A method for browsing a data communications network, the method comprising:
receiving a request for a cookie;
returning said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a static cookie;
reconfiguring said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a dynamic cookie; and
returning said reconfigured cookie.
6. A method for servicing data communications network information units, the method comprising:
receiving a cookie associated with a network site;
using said cookie if said cookie is a static cookie; and

reconstructing said cookie before using said cookie if said cookie is a dynamic cookie.

7. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for browsing a data communications network, the method comprising:
- requesting user data from a user-controlled secure device if a network site that requires said user data is accessed, said requesting occurring prior to requesting said user data from another device; and
 - sending said user data to a network server associated with said network site if said user data is received from said user-controlled secure device.
8. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for browsing a data communications network, the method comprising:
- receiving a request for user data;
 - returning said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises static user data;
 - reconfiguring said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises dynamic user data; and
 - returning said reconfigured user data.

9. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for servicing data communications network information units, the method comprising:
- receiving user data associated with a network site;
 - using said user data if said user data comprises static user data; and
 - reconstructing said user data before using said user data if said user data comprises dynamic user data;
10. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for browsing a data communications network, the method comprising:
- requesting a cookie from a user-controlled secure device if a network site that requires said cookie is accessed, said requesting occurring prior to requesting said cookie from another device; and
 - sending said cookie to a network server associated with said network site if said cookie is received from said user-controlled secure device.
11. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for browsing a data communications network, the method comprising:
- receiving a request for a cookie;
 - returning said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a static cookie;

reconfiguring said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a dynamic cookie; and returning said reconfigured cookie.

12. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for servicing data communications network information units, the method comprising:
- receiving a cookie associated with a network site;
 - using said cookie if said cookie is a static cookie; and
 - reconstructing said cookie before using said cookie if said cookie is a dynamic cookie.

13. An apparatus for browsing a data communications network, the apparatus comprising:
- means for requesting user data from a user-controlled secure device if a network site that requires said user data is accessed, said requesting occurring prior to requesting said user data from another device; and
 - means for sending said user data to a network server associated with said network site if said user data is received from said user-controlled secure device.

14. An apparatus for browsing a data communications network, the apparatus comprising:
- means for receiving a request for user data;

means for returning said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises static user data;

means for reconfiguring said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises dynamic user data; and

means for returning said reconfigured user data.

15. An apparatus for servicing data communications network information units, the

apparatus comprising:

means for receiving user data associated with a network site;

means for using said user data if said user data comprises static user data; and

means for reconstructing said user data before using said user data if said user data comprises dynamic user data;

16. An apparatus for browsing a data communications network, the apparatus

comprising:

means for requesting a cookie from a user-controlled secure device if a network site that requires said cookie is accessed, said requesting occurring prior to requesting said cookie from another device; and

means for sending said cookie to a network server associated with said network site if said cookie is received from said user-controlled secure device.

17. An apparatus for browsing a data communications network, the apparatus

comprising:

means for receiving a request for a cookie;

means for returning said cookie if said cookie is found and if returning cookies for

said request is enabled and if said cookie comprises a static cookie;

means for reconfiguring said cookie if said cookie is found and if returning cookies

for said request is enabled and if said cookie comprises a dynamic cookie; and

means for returning said reconfigured cookie.

18. An apparatus for servicing data communications network information units, the

apparatus comprising:

means for receiving a cookie associated with a network site;

means for using said cookie if said cookie is a static cookie; and

means for reconstructing said cookie before using said cookie if said cookie is a

dynamic cookie.

19. An apparatus for browsing a data communications network, the apparatus

comprising:

a network browser configured to request user data from a user-controlled secure

device if a network site that requires said user data is accessed, said request

occurring prior to requesting said user data from another device, said network

browser further configured to send said user data to a network server associated

with said network site if said user data is received from said user-controlled secure device.

20. An apparatus for browsing a data communications network, the apparatus comprising:

a smart card configured to receive a request for user data, said smart card further configured to return said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises static user data, said smart card further configured to reconfigure said user data if said user data is found and if returning user data for said request is enabled and if said user data comprises dynamic user data, said smart card further configured to return said reconfigured user data.

21. An apparatus for servicing data communications network information units, the apparatus comprising:

a network server configured to receive user data associated with a network site, said network server further configured to use said user data if said user data comprises static user data, said network server further configured to reconstruct said user data before using said user data if said user data comprises dynamic user data;

22. An apparatus for browsing a data communications network, the apparatus

comprising:

a network browser configured to request a cookie from a user-controlled secure device if a network site that requires said cookie is accessed, said requesting occurring prior to requesting said cookie from another device, said network browser further configured to send said cookie to a network server associated with said network site if said cookie is received from said user-controlled secure device.

23. An apparatus for browsing a data communications network, the apparatus

comprising:

a smart card configured to receive a request for a cookie, said smart card further configured to return said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a static cookie, said smart card further configured to reconfigure said cookie if said cookie is found and if returning cookies for said request is enabled and if said cookie comprises a dynamic cookie, said smart card further configured to return said reconfigured cookie.

24. An apparatus for servicing data communications network information units, the

apparatus comprising:

a network server configured to receive a cookie associated with a network site; said network server further configured to use said cookie if said cookie is a static

cookie, said network server further configured to reconstruct said cookie before using said cookie if said cookie is a dynamic cookie.

25. An apparatus for enhanced privacy protection in identification in a data

communications network, the apparatus comprising:

a smart card configured to store a randomized ID obtained in response to enrolling for a service on said data communications network, said smart card further configured to release said randomized ID to obtain services on said data communications network.